

# International Student-Athletes' Perceptions of Belonging and Inclusion During Their First Year at an NCAA Division I Institution

By  
© 2018

Emily Josephine Tyler  
B.A., University of Kansas, 2015

Submitted to the graduate degree program in Educational Psychology and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Master of Science.

---

Chair: Dr. Brian Cole, Ph.D.

---

Dr. Thomas Krieshok, Ph.D.

---

Dr. Phil Lowcock, Ph.D.

Date Defended: 8 May 2018

The thesis committee for Emily Josephine Tyler certifies that this is  
the approved version of the following thesis:

**International Student-Athletes' Perceptions of Belonging and  
Inclusion During Their First Year at an NCAA Division I Institution**

---

Chair: Dr. Brian Cole, Ph.D.

Date Approved: 8 May 2018

## Abstract

The number of international student-athletes (ISAs) who compete at the NCAA Division I level continues to grow. Research has shown that ISAs' experience during their first year in collegiate athletics differs from their domestic student-athlete (DSA) peers. Given the well-known benefits of belongingness and inclusion, this study examined international and domestic student-athletes' feelings of cultural isolation, cultural acceptance, belonging, and inclusion during their first year in college. It was hypothesized that when reflecting on their first year in college, in comparison to DSAs, ISAs would report higher levels of cultural isolation and lower levels of cultural acceptance, belonging, and inclusion. To test this hypothesis, an online survey was distributed to selected student-athletes at one university. Participants included 23 ISAs and 21 DSAs from Kansas Athletics Incorporated (KAI;  $n=44$ ; 36 females, 8 males). Participants originated from 19 countries and 15 of the department's 16 teams were represented in the sample. Newell's (2016) First-Year Experience in Collegiate Athletics Survey was used and several items were added to assess cultural acceptance, belonging, and inclusion. MANOVA was used to assess mean differences between the two groups of ISAs and DSAs. As predicted, the ISAs reported higher cultural isolation and lower levels of cultural acceptance than the DSAs. Belonging and inclusion revealed no significant main effect based on international status. The findings indicate that DSAs and ISAs may experience similar feelings of belonging and inclusion during their first-year experience at KAI but the groups have experienced different levels of cultural isolation and cultural acceptance.

## Table of Contents

Chapter 1: Introduction .....	1
Background .....	1
Statement of the Problem .....	2
Purpose of the Study .....	3
Significance of the Study .....	3
Definition of Terms .....	4
Thesis Overview .....	5
Chapter 2: Literature Review .....	6
International Student-Athletes .....	6
International Student-Athlete Adjustment Challenges .....	7
Belonging and Inclusion Overview .....	8
Belonging .....	9
Inclusion .....	10
Chapter 3: Methodology .....	13
Participants & Procedure .....	13
Measures .....	15
First-Year Experience in Collegiate Athletics Survey .....	16
Belonging and Inclusion Items .....	17
Hypotheses .....	17
Data Analysis .....	18
Chapter 4: Results .....	19
Chapter 5: Discussion .....	22
Summary of Results .....	22
Limitations .....	25
Future Directions .....	26
References .....	27
Appendix A: IRB Approval .....	34
Appendix B: Recruitment Email .....	35

Appendix C: Information Statement.....	36
Appendix D: Survey .....	37
Appendix E: MANOVA Outputs .....	41
Appendix F: Figures .....	47

## List of Tables

Table 1: Academic Years Completed at KU.....	15
Table 2: Research Question 1 Descriptive Statistics .....	19
Table 3: Research Question 2 Descriptive Statistics .....	20
Table 4: Research Question 3 Descriptive Statistics .....	21

## **Chapter 1: Introduction**

### **Background**

International student-athletes (ISAs) are sojourning to the United States to further their education and are competing on various athletic teams throughout the United States at an increasing rate. More than 19,000 ISAs studied and competed at NCAA member institutions during the 2016-2017 academic year and over half, 10,761, were competing at the Division I level (NCAA, 2017). Additionally, almost 6 percent (5.91%) of the entire Division I student-athlete population were ISAs, or nonresident aliens. The large number and increasing growth of ISAs demonstrates the prevalence and importance for studying this population.

Current research on the ISA population has varied in themes, yet adjustment and transition to intercollegiate athletics in the U.S. have been studied most commonly (Bista & Gaulee, 2017; Foo, 2013; Pierce, Popp & Meadows, 2011; Sabourin, 2017). Although ISA adjustment has been commonly studied, there has yet to be a focus on belonging and inclusion during the adjustment process to collegiate athletics. Feeling a sense of belonging and inclusion are basic human fundamental needs and can give individuals a sense of comfort, safety, acceptance, and enhance overall well-being (Baumeister & Leary, 1995; Goodenow, 1993; Hagerty & Patusky, 1995; Maslow, 1954).

In 2010, the NCAA restructured and refocused its diversity and inclusions efforts and emphasized a need for more inclusive environments while urging institutions to shift from embracing diversity to encouraging inclusion (NCAA, 2018c). Although the NCAA has emphasized inclusion for almost ten years, very little is known about the experience of ISAs. The current study begins to fill this gap in the literature by assessing ISAs' feelings of belonging and inclusion, particularly during their first year in college athletics.

## **Statement of the Problem**

The NCAA has experienced an increase in the number of ISAs who are enrolled and competing on teams within the Association's various institutions. Most of these students face additional adjustment challenges (i.e., language barriers, acculturation, additional travel, distance from family or home) that oftentimes domestic student-athletes (DSAs) do not experience. These challenges often occur during their first year on campus and can have psychological and emotional effects and may have a negative impact on their overall collegiate experience in the United States. Some ISAs have reportedly felt marginalized and have experienced discrimination and negative stereotypes based on their race and region of origin during their experience at U.S. colleges and universities (Lee & Opio, 2011; Sato, Hodge, & Burge-Hall, 2011).

A sense of belonging can have positive impacts on college student outcomes both academically and psychologically. Inclusion, much like belonging, is a feeling or experience that can bring happiness and contentment to individuals. In contrast, college students who experienced low feelings of belonging, reportedly, had lower academic achievement, were less motivated to achieve, and often displayed more psychological adjustment difficulties than students who felt as though they belong (Freeman, Anderman, & Jensen, 2007; Mueller, 2008; Pittman & Richmond, 2007).

In the last ten years, the NCAA has emerged from embracing diversity to emphasizing and encouraging inclusion practices amongst all members. Although the NCAA has called for inclusion, there is minimal research regarding student-athletes' experiences of overall inclusion and belonging during their collegiate careers. Moreover, very little is known about the experience of ISAs and if they experience similar levels of inclusion and belonging as their DSA peers during their first year on campus.



## **Purpose of the Study**

This study examines international and domestic student-athletes' feelings of belonging, inclusion, cultural acceptance, and cultural isolation during their first year as members of a college athletics department. The aim of the study is to examine three research questions: (1) Are there differences in reported levels of cultural isolation and cultural acceptance between first-year international student-athletes and domestic student-athletes at Kansas Athletics Inc.? (2) Is there a difference in reported levels of overall belonging during the first year at Kansas Athletics Inc. between international student-athletes and domestic student-athletes? (3) Is there a difference in reported levels of overall inclusion during the first year at Kansas Athletics Inc. between international student-athletes and domestic student-athletes?

Having a better understanding of international student-athletes' adjustment experience, in general, is important because, as supported by the literature, their adjustment and transition to college differs from domestic student-athletes' experience (Bentzinger, 2016; Popp, Love, Kim, & Hums, 2010). By investigating the international student-athlete population more thoroughly, an athletic department can gather more information about their international student-athletes' experience so they can better serve and support these student-athletes throughout their tenure at the university. Furthermore, assessing student-athletes' feelings of belonging and inclusion in the athletic department, on their team, and on the university's campus, may help to not only better understand their experience, but it also assists in assessing the need for additional programming or support for these individuals.

## **Significance of the Study**

While much of the research conducted on collegiate international student-athletes has been about their transition to college (Bentzinger, 2016; Bista & Gaulee, 2017; Lee & Opio,

2011; Newell, 2016; Popp et al., 2010; Ridinger & Pastore, 2000; Sato et al., 2011), the focus on their feelings of belonging and inclusion, exclusively, is scarce. Moreover, there has been little to no research done regarding feelings of belonging and inclusion experienced by international student-athletes in comparison to domestic student-athletes during their first year in college athletics.

This study uses quantitative methodology to analyze between group differences of feelings of belonging and inclusion experienced by student-athletes during their first year at one NCAA Division I athletic department. It is hypothesized that international student-athletes will report higher levels of cultural isolation, lower levels of cultural acceptance, and lower overall belonging and inclusion than domestic student-athletes during their first year in collegiate athletics.

### **Definition of Terms**

This section provides definitions for the terms that are used throughout this paper.

**International student-athlete (ISA):** An individual competing in intercollegiate athletics who is not originally from the United States.

**Domestic student-athlete (DSA):** An individual competing in intercollegiate athletics who is originally from the United States.

**National Collegiate Athletic Association (NCAA):** The governing body of 1,117 colleges and universities' athletic endeavors (NCAA, 2018e). The NCAA is made up of three membership classifications that are known as Divisions I, II, and III.

**Division I:** Division of the NCAA that encompasses nearly 350 institutions.

Among the three NCAA divisions, Division I schools generally have the biggest student bodies, manage the largest athletics budgets, and offer the most generous number of

scholarships. Schools who are members of Division I commit to maintaining a high academic standard for student-athletes in addition to a wide range of opportunities for athletics participation (NCAA, 2018b, Para. 1).

Division I schools field more than 6,000 athletics teams, providing opportunities for more than 170,000 student-athletes to compete in NCAA sports each year (NCAA, 2018b).

**Belonging:** A feeling of acceptance and connection to others as a member or part of a group; “an experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment” (Hagerty, Lynch-Sauer, Patusky, Bouwseman, & Collier, 1992, p. 173).

**Inclusion:** An experience one has when they feel accepted, respected, welcome, invited in, and safe in a group.

## **Thesis Overview**

The rest of this thesis covers international student-athletes and the unique challenges they face during their adjustment to intercollegiate athletics in the United States and the importance of incorporating belonging and inclusion into the research on international student-athlete adjustment. Chapter 2 is a review of relevant literature on international student-athletes including their adjustment experience transitioning to college. The chapter will also go into more detail about the belonging and inclusion constructs. Chapter 3 explains the methodology used to conduct the current study. Chapter 4 shares the findings of the study. The thesis is concluded in Chapter 5, which provides context for the results of the study and discusses the limitations of the current study. Future directions are explored, as well as implications for the athletic department and university in which this study took place. Additionally, suggestions for how they can utilize the results to better serve the international student-athlete population are presented.

## **Chapter 2: Literature Review**

Research on international student-athletes (ISAs) has grown as that population in the NCAA has increased over the last two decades. However, there is still a scarcity of literature regarding the experiences of this population. The following chapter will begin with an introduction about the ISA population and give an overview of the research done with this population, particularly regarding adjustment challenges. The chapter will also explore the constructs of belonging and inclusion in greater detail as they pertain to college students.

### **International Student-Athletes**

More than 19,000 ISAs studied and competed at NCAA member institutions during the 2016-2017 academic year and even though this was only 3.8 percent of the larger student-athlete population, the number of students traveling from various countries to study and compete at NCAA institutions is growing (NCAA, 2017). Given this growth, in March 2018, the NCAA publicized trends regarding participation of ISAs in Division I. In the 2009-2010 academic year, 8.5 percent (2,120), of the first-year student-athlete cohort entering Division I, were international student-athletes. This number increased by 2.1 percent for the 2015-2016 year, with 10.6 percent (2,885) of the first-year student-athletes being international (NCAA, 2018d). This growth demonstrates the increased need to study this population so colleges and universities, as well as intercollegiate athletic departments, can better support this population.

In 2016 alone, there were about 139 graduate dissertations and theses related to the issues and challenges of international students (Bista & Gaulee, 2017). Themes that have been researched with the international collegiate athlete population have been related to ISA motivation to come to the United States, acculturation, adjustment, retention, satisfaction, and language barriers (Bale, 1991; Battle, 2016; Bentzinger, 2016; Popp et al., 2010; Ridinger &

Pastore, 2000). Of these listed topics, ISA adjustment has been most prevalent in the recent literature.

### **International Student-Athlete Adjustment Challenges**

During a student's first year of college, they are often faced with challenges in emotional, social, and academic adjustments and challenges (Chickering, 1969; Ridinger & Pastore, 2000). Student-athletes, however, experience additional pressures adjusting to demands of participating in intercollegiate athletics (Etzel, Ferrante, & Pickney, 1996; Jackson & Krane, 1993; Ryan, 1989). In addition to these adjustments, many ISAs face unique challenges, sometimes even before they arrive on campus. While the countries where international students originate vary, the challenges they encounter are often similar. These unique challenges include additional travel, language barriers, difficulties adjusting to a new sports culture, acclimation issues, isolation, racism, financial, social, and other intrapersonal challenges (Church, 1982; Mori, 2000; NCAA, 2018a). Many of these unique challenges are added stressors on these student-athletes which can contribute to social isolation and loneliness (Sato & Burge-Hall, 2008).

Studies addressing transitional issues faced by ISAs have ranged in method, most being exploratory (Pierce et al., 2011; Ridinger & Pastore, 2000). In a qualitative study assessing challenges and difficulties faced by student-athletes originating from Africa and attending colleges in the United States, Lee and Opio (2011) found that many of the serious issues affecting the African student-athletes were matters related to the "host environment's underestimations about the African student-athletes' desire to learn, misunderstandings about their culture and religions, and other negative assumptions that undermined their academic success" (p. 641). Lee and Opio also found that the vast majority of the African student-athletes

in their study experienced negative stereotypes and discrimination based on their race and their region of origin.

Few studies have compared the ISA adjustment experience to the DSA adjustment experience (Newell, 2016). When comparing DSA adjustment to ISA adjustment, Ridinger and Pastore (2000) found that adjustment to college did not appear to be problematic for ISAs in comparison to DSAs or nonathletes. To expand on this research, Newell created an instrument to evaluate the adjustment experience of first-year students while also including items pertaining to challenges that ISAs face (e.g., additional travel, language barriers, cultural differences) as well as student-athlete issues. Although an item from Newell's instrument asks participants about their experience with cultural isolation, which is related to belonging and inclusion, there has been little to no research done regarding feelings of belonging and inclusion experienced by ISAs in comparison to DSAs during their first year in college athletics.

### **Belonging and Inclusion Overview**

Throughout the years, belonging and inclusion have been researched in a variety of forms with various definitions. Early psychologist and philosopher, William James (1890), described belonging and inclusion as a recognition by and acceptance into social groups. Social psychology literature also suggests that human beings possess a fundamental need for inclusion and belonging to survive (Maslow, 1954). At settings like college campuses, members of marginalized groups, such as international students, are at risk for experiencing doubts and uncertainty about belonging (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; Murphy & Zirkel, 2015; Purdie-Vaughns, Steele, Davies, Dittmann, & Crosby, 2008; Walton & Cohen, 2007). The following sections will describe belonging and inclusion separately and prior research done with each of these constructs.

**Belonging.** Baumeister and Leary (1995) suggest that after primary needs such as food, safety, and shelter are satisfied, the need to belong is among the strongest of human motivations. Further, Baumiester and Leary suggest that the need to belong has a direct influence on cognitive and emotional outcomes. Belonging has been defined as an individual's feelings of "engagement in, commitment to, and connectedness" to leaders and peers within their program (McDonough, Ullrich-French, Anderson-Butcher, Amorose, & Riley, 2013, p. 434). Belonging has also been defined as "an experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment" (Hagerty et al., 1992, p. 173). The latter definition will be used for the purposes of this study.

A sense of belonging is important because when an individual does not feel bonded with others they may experience loneliness, rejection, and exclusion which can have a strong impact on their well-being (Abrams, Hogg, Marques, 2004; Allen, 2006). Furthermore, according to Abrams et al., psychological effects of exclusion consist of a contradiction of self, self-concept threat, lowered self-esteem, anger, frustration, emotional denial, and cognitive impairment. "The concept of individual sense of belonging can be thought of as an essential component of achieving inclusive excellence because of its connection with student success and redefining higher education as a diverse community of students, scholars, and staff" (Hurtado, 2012, p. x). Researchers, Carini, Kuh, and Klein (2006), suggest that the degree in which students are able to integrate into a campus community has a direct influence on their decision to persist through college. In support of this notion, research with university students indicates that students with low feelings of belonging have lower academic achievement, are less motivated to achieve, and often display more psychological adjustment difficulties than students who feel as though they belong (Freeman et al., 2007; Mueller, 2008; Pittman & Richmond, 2007). Additionally,

researchers, Pittman and Richmond (2008) examined college students' sense of belonging and concluded that student belonging was linked to students' experiences of stress and focus on academic work. Therefore, sense of belonging can have a powerful impact on college student outcomes both academically and psychologically.

**Inclusion.** Gruter and Masters (1986) depicted inclusion as a form of protection and is associated with security. In 2012, the then-president of the National Association of Diversity Officers in Higher Education, Dr. Benjamin D. Reese Jr., described the importance of inclusion and described it as “creating a respectful and healthy environment so that everyone can feel fully engaged and enjoy the life of the family” (Cooper, 2012). The literature supports this notion by Dr. Reese, with research suggesting that inclusion and acceptance lead to happiness and contentment (Baumeister & Tice, 1990; McAdams & Bryant, 1987). Interventions that have targeted inclusion among marginalized group members have successfully increased individuals' sense of belongingness and fit, and in turn a myriad of other critical outcomes including health, well-being, academic performance, and persistence (Brannon, Carter, Murdock-Perriera, & Higginbotham, 2018; Brannon, Markus, & Taylor, 2015; Stephens, Markus, & Phillips, 2014; Walton & Cohen, 2007).

Although inclusion is a human fundamental need, different cultures value social support differently (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Cultures might differ in how they experience exclusion and inclusion. For example, people with an individualistic cultural background might benefit less from a transition to inclusion than people from collectivistic cultures (Pfundmair, Graupmann, Du, Frey, & Aydin, 2015). This is important to consider when studying ISAs, their cultural background may be different from their new culture in the United States.



As mentioned previously, the NCAA Office of Inclusion has expressed a commitment to the education and development of the Association's members and participants and has emphasized that an inclusive culture is the best approach to achieving diversity (NCAA, 2018c). Further, the NCAA encourages a shift from embracing diversity as a metric to encouraging inclusion as a value in leadership by providing access to career opportunities supportive of the retention and advancement of coaches and administrators from diverse backgrounds. The shift from embracing diversity to encouraging inclusion is progress and is supported in the literature. The NCAA is striving to change its values and not only accept people of various backgrounds, but the Association wants everyone, regardless of role or position, to feel comfortable, respected, and collaborate with one another to serve and excel. This is what inclusion is; feeling comfort, respect, and collaborate in union with one another despite differences. As T. Hudson Jordan, Director of Global Diversity and Talent Strategies, described:

Diversity means all the ways we differ. Some of these differences we are born with and cannot change. Anything that makes us unique is part of this definition of diversity.

Inclusion involves bringing together and harnessing these diverse forces and resources, in a way that is beneficial. Inclusion puts the concept and practice of diversity into action by creating an environment of involvement, respect, and connection—where the richness of ideas, backgrounds, and perspectives are harnessed to create business value.

Organizations need both diversity and inclusion to be successful” (Jordan, 2010 p. 54).

The NCAA has demonstrated their belief in this structure, especially in recent years. From the Office of Inclusion to individual institutions, NCAA members are moving from embracing only diversity to encouraging inclusion also. Although the NCAA has emphasized inclusion for almost ten years, very little is known about the experiences of ISAs. The current study begins to

fill this gap in the literature by assessing international student-athletes' feelings of belonging and inclusion, particularly during their first year in college athletics.

### **Chapter 3: Methodology**

The purpose of the study, as previously noted, was to identify differences between international student-athletes (ISAs) and domestic student-athletes (DSAs) during their first-year in one college athletic department. Student-athletes' feelings of belonging and inclusion during their first-year were explored through a quantitative approach. A purposeful sampling method was utilized and participants completed an online survey. The following sections will describe the current study's participants, procedure, measures, hypotheses, and data analysis.

#### **Participants & Procedure**

The participants solicited for the study were student-athletes in The University of Kansas' athletics department, Kansas Athletics Incorporated (KAI). The University of Kansas (KU) is in the northeastern part of Kansas and is a NCAA Division I institution. KAI houses around 550 student-athletes and 16 sport teams. Purposeful sampling was the chosen method for gaining participants for this study. In purposeful sampling, researchers intentionally select individuals to learn or understand the central phenomenon (Creswell, 2012). Therefore, it was important that the participants were selected based on controlled sampling. Participants were selected based on their home country, the sport in which they competed, how many years they have completed at KU, and their gender.

Upon approval from KAI administrators, the researcher acquired a list of the student-athletes enrolled at KU along with their international status. The list included whether the student-athletes were from countries other than the United States, their sport, gender, and year in school. At the time of data collection, there were a total of 36 ISAs enrolled in classes at KU. Every ISA was solicited to participate in the study. To match the number of ISAs, 36 DSAs were randomly selected by the researcher and were recruited for the study. The researcher considered

the sport, gender, and academic years completed when selecting DSAs to recruit. The intent was to match the demographics of the ISAs for possible comparisons.

Following the University of Kansas' Institutional Review Board's approval (Appendix A), the selected student-athletes ( $N=72$ ) were emailed a link to a Qualtrics survey by the director of Student-Athlete Support Services. The department suggested that the director of Student-Athlete Support Services, someone most of the student-athletes are familiar with, email the student-athletes details about the study. KAI officials thought the student-athletes would be more likely to respond to a message sent from a KAI official rather than by the researcher.

The email message to the selected student-athletes included a description of the study and parameters for participating (see Appendix B for recruiting materials). Persons 17 years or younger were asked to decline to participate. There was no compensation for participating and participants were free to quit at any time. Moreover, the student-athletes were not required to participate in the study. Prior to engaging in the study, participants had the opportunity to read an information statement (Appendix C) and decide for themselves about their own participation. After consenting to participate in the study, participants were taken to the survey.

Participants included 44 current student-athletes at KAI (36 females, 8 males; a 61% response rate from the solicited participants). 23 (52.3%) participants considered themselves ISAs and 21 (47.7%) were DSAs. Participants originated from 19 different countries and 15 of the department's 16 teams were represented in the sample. Many of the participants identified as White or Caucasian (54.5%) with the remaining participants identifying themselves as Asian or Asian American (11.4%), Black or African American (11.4%), Hispanic or Latino (9.1%), Multiracial (9.1%), Other (6.8%).

The current study examined student-athletes' responses to questions regarding their first-year experience at KU. Therefore, students who were entering their first year were not included for this study and all participants in the sample had completed at least one academic year at KU (see Table 1 for breakdown of years completed). For this sample, the mean years completed at KU was 2.91 years ( $SD= 1.074$ ).

Table 1

*Academic Years Completed at KU*

Years	Frequency	Percent
1	21	47.7
2	11	25.0
3	8	18.2
4	3	6.8
5+	1	2.3
Total	44	100.0

**Measures**

Due to the strict time demands of student-athletes, the researcher elected to use a quantitative approach for this study. The survey was written in English and comprised of two sections: (1) A very brief demographics section; (2) A section on their first-year experience in collegiate athletics.

**First-Year Experience in Collegiate Athletics Survey.** An instrument that assesses student-athletes' transitional and adjustment experience to collegiate athletics and includes ISA transitional issues which had not been covered in the literature until recently. Newell (2016) developed a survey, First-Year Experience in Collegiate Athletics Survey (FYECAS), to measure student-athletes' experience transitioning to college while factoring in additional adjustment issues ISAs may face (e.g., language comprehension, U.S. culture). Although the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1989) has been used in the literature to study ISAs' and DSAs' transition to college, the instrument does not include questions which may pertain to ISAs' adjustment barriers or student-athletes' challenges (Ridinger & Pastore, 2000). The purpose of Newell's instrument was to identify what ISAs feel impacts their ability to transition easily to American higher education and become a well-adjusted student-athlete. In Newell's study, the instrument was used for between group comparison between ISAs and DSAs at one NCAA Division I institution, much like the current study. It should be noted that there have yet to be any published studies measuring the validity and reliability of Newell's instrument.

The FYECAS consisted of 18 items and used a six-point Likert scale ranging from 1 ("strongly disagree") to 6 ("strongly agree") without a "neutral" or "no response" option for the respondents. The items were broken up into two parts. Each block begins with a stem which requires the participant to reflect on their first-year experience in college and as a student-athlete. The first was a block with questions pertaining to the general college student adjustment experience (e.g., cultural adjustment, homesickness, time management). The second block of questions was tailored to the student-athlete adjustment experience, including items that addressed transition issues related specifically to athletics (e.g., NCAA rules, playing time).

Items were analyzed individually with values ranging from 1 to 6, with 1 being the lowest on the scale and 6 being attributed to the highest score for each item; the actual meaning attached to each number differed depending on the question asked. The specific values of each question can be seen on the copy of the survey provided in Appendix D.

**Belonging and Inclusion Items.** Measures that explicitly ask student-athletes about their feelings of belonging or inclusion during their first year in college athletics do not currently exist in the literature. Several items were added to the FYECAS for the purposes of this study and should be viewed as exploratory. The added items were intended to measure cultural acceptance, and overall feelings of belonging and inclusion at the university. These items were reviewed by three researchers in the field of psychology and three administrators in KAI, all subject-matter experts. Every student-athlete experiences the college campus, the athletic department, and their team. Therefore, overall belonging and overall inclusion are measured with only these three areas in mind. Although many student-athletes are members of other organizations in college, overall inclusion and belonging, for the purposes of this study, is only examining the athletic department, campus, and their team. The items added to the FYECAS are listed in Appendix D and are indicated with an asterisk.

## **Hypotheses**

Specifically, the following hypothesis were tested:

1. ISAs will report lower levels of cultural acceptance than DSAs during their first year at KAI (1a) and ISAs will report higher levels of cultural isolation than DSAs during their first year at KAI (1b).
2. ISAs will report lower levels of overall belonging than DSAs during their first year at KAI.

3. ISAs will report lower levels of overall inclusion than DSAs during their first year at KAI.

### **Data Analysis**

These hypotheses were explored using multivariate analysis of variance (MANOVA). MANOVA is used to compare the mean differences among two or more groups on multiple dependent variables at once (Creswell, 2012). Multiple items were combined to create two variables (i.e., belonging and inclusion). Using MANOVA also reduced Type I error.



## Chapter 4: Results

This chapter will explore the results of the data analysis of the three research questions. Data analysis was conducted in two distinct steps in the current study. Firstly, descriptive statistics and frequencies were calculated for the demographic information for all participants. Secondly, to assess the influence of the demographic factors of interest, three MANOVAs were calculated (see Appendix E for all MANOVA outputs and Appendix F for graphs).

In order to test hypotheses 1a and 1b, a 2 x 2 MANOVA (international status x cultural items) was computed utilizing two questions regarding cultural isolation and cultural acceptance as the dependent variables. The 2 x 2 MANOVA (international status x cultural items) revealed a significant main or interaction effect for the independent variables in question, international status, across the two questions of cultural acceptance and cultural isolation. See Table 2 for the mean scores for ISAs and DSAs on cultural isolation and acceptance (Figures F1 and F2).

Table 2

### *Research Question 1 Descriptive Statistics*

For the following questions, please use the stem: During my first year of college, I often.....	International/ Domestic	Mean	Std. Deviation	N
felt culturally isolated.	ISAs	2.65	.982	23
	DSAs	1.67	.658	21
(1 = strongly disagree, 6 = strongly agree)	Total	2.18	.971	44
felt culturally accepted.	ISAs	4.43	.788	23
	DSAs	5.00	.632	21
(1 = strongly disagree, 6 = strongly agree)	Total	4.70	.765	44

The MANOVA of cultural isolation and acceptance scores by ISA/DSA status revealed effects for ISAs,  $F(2,41) = 8.677, p < .05$ ; Wilk's  $\Lambda = 0.703$ . As predicted, ISAs reported significantly higher levels of cultural isolation than DSAs,  $F(2,41) = 14.984, p < .000$ . There was also a statistically significant difference in cultural acceptance based on ISA or DSA status,

$F(2,41) = 6.803, p < .05$ . Therefore, hypothesis 1a and 1b were supported; MANOVA denoted a significant difference between ISAs and DSAs and the level of cultural isolation and cultural acceptance experienced in the first year at KAI.

A second MANOVA, a 2 x 3 MANOVA (international status x belonging) tested hypothesis 2, overall feelings of belonging in the three main areas student-athletes experience (i.e., athletic department, campus, and team). See Table 3 for the mean scores for ISAs and DSAs on belonging (Figure F3). A 2 x 3 MANOVA (international status x belonging) revealed no significant main or interaction effects for the independent variables in question, ISA or DSA status, across the three questions of belonging. Therefore, hypothesis 2 was not supported.

Table 3

*Research Question 2 Descriptive Statistics*

For the following questions, please use the stem: During my first year as a student athlete.....	International/ Domestic	Mean	Std. Deviation	N
I felt like I belonged in the athletic department.  (1 = strongly disagree, 6 = strongly agree)	ISAs DSAs Total	5.00 4.52 4.77	.798 .928 .886	23 21 44
I felt like I belonged on my team.  (1 = strongly disagree, 6 = strongly agree)	ISAs DSAs Total	4.39 4.52 4.45	.941 1.030 .975	23 21 44
I felt like I belonged on campus.  (1 = strongly disagree, 6 = strongly agree)	ISAs DSAs Total	5.00 4.67 4.84	.674 .658 .680	23 21 44

Finally, the third MANOVA, a 2 x 3 MANOVA (international status x inclusion) tested hypothesis 3, overall feelings of inclusion in the three areas student-athletes experience (i.e., athletic department, campus, and team). See Table 4 for the mean scores for ISAs and DSAs on inclusion (Figure F4). A 2 x 3 MANOVA (international status x inclusion) revealed no

significant main or interaction effect for the independent variables in question, ISA or DSA status, across the three questions of inclusion. Therefore, hypothesis 3 was not supported.

Table 4

*Research Question 3 Descriptive Statistics*

For the following questions, please use the stem: During my first year as a student athlete.....	International/ Domestic	Mean	Std. Deviation	N
I felt included in the athletic department.  (1 = strongly disagree, 6 = strongly agree)	ISAs	5.04	.706	23
	DSAs	4.81	.814	21
	Total	4.93	.759	44
I felt included on my team.  (1 = strongly disagree, 6 = strongly agree)	ISAs	5.00	.674	23
	DSAs	4.81	.873	21
	Total	4.91	.772	44
I felt included on campus.  (1 = strongly disagree, 6 = strongly agree)	ISAs	4.35	.832	23
	DSAs	4.71	.784	21
	Total	4.52	.821	44

## **Chapter 5: Discussion**

Even with the rapidly growing population of international student-athletes (ISAs) in NCAA sports, very little has been done to study this population's experience in comparison to their domestic student-athlete (DSA) peers. Previous researchers have investigated ISAs' adjustment to college with some studies analyzing differences between ISAs and DSAs but most studies have been qualitative and have had relatively small sample sizes (Battle, 2016; Newell, 2016; Pierce et al, 2011; Ridinger & Pastore, 2000).

The NCAA has called for all its member institutions to encourage and create inclusive spaces for everyone (NCAA, 2018c). Yet very little research has been done regarding the ISAs' perceptions of belonging and inclusion and if their experience is like their DSA peers'. The current study was created to explore this further.

### **Summary of Results**

The purpose of this study was to examine student-athletes' feelings of belonging, inclusion, cultural acceptance, and cultural isolation during their first year as members of a college athletics department. The study included an online survey that was completed by a sample of 44 student-athletes enrolled at The University of Kansas (KU) representing two overarching demographic groups: international student-athletes ( $n= 23$ ) and domestic student-athletes ( $n= 21$ ).

Questions pertained to the student-athletes' experience during their first year at Kansas Athletics Incorporated (KAI). Items regarding their perceptions of cultural acceptance and cultural isolation were included, as the researcher believed, based on a review of the literature, the items were connected to the belonging and inclusion constructs. The aim of the study was to examine three research questions: (1) Are there differences in reported levels of cultural isolation

and cultural acceptance among international student-athletes and domestic student-athletes during their first year at Kansas Athletics Inc.? (2) Is there a difference in reported levels of overall belonging during the first year at Kansas Athletics Inc. between international student-athletes and domestic student-athletes? (3) Is there a difference in reported levels of overall inclusion during the first year at Kansas Athletics Inc. between international student-athletes and domestic student-athletes?

For the first research question, it was hypothesized that ISAs would report having lower levels of cultural acceptance and higher levels of cultural isolation than DSAs during their first year at KAI. The ISAs indicated significantly higher levels of cultural isolation during their first year as a student-athlete at KAI than their DSA peers (Hypothesis 1a). The ISA participants also indicated significantly lower levels of cultural acceptance during their first year as a student-athlete at KAI (Hypothesis 1b). This could mean that ISAs in the study were feeling more cultural isolation and less cultural acceptance than their DSA peers during their first year. Thus, these hypotheses were supported.

There are numerous reasons why these findings could imply that a problem may exist in the lives of ISAs. When an individual does not feel bonded to others (i.e., feels culturally isolated and does not feel culturally accepted), they may experience loneliness, rejection, and exclusion (Abrams et al., 2004). Additionally, Abrams et al. suggest that this may have a strong impact on an individual's well-being and bring psychological effects such as contradiction of self, self-concept threat, lowered self-esteem, anger, frustration, emotional denial, cognitive impairment. As the number of ISAs competing in the NCAA is increasing, the Association, conferences, and individual institutions and athletic departments should give more attention to this population and support them so they do not experience these effects of isolation and exclusion.

Variables in Newell's (2016) measure, particularly cultural isolation, cultural adjustment, and language comprehension amongst ISAs and DSAs, were all found to have significant mean differences identified between the international and domestic student-athlete samples. Based on these results and Kwon's (2009) study on international student adjustment to college and the language barriers, Newell (2016) suggested that language speaking experience may play a large factor in the cultural isolation experienced by the ISA. This may be the similar case for the current study, however further analysis is needed to confirm this.

With results that indicate there are significant differences between the means of these two groups on these items, it would suggest that there be additional supports in place to better support the ISA population through their transition to the US. Additionally, KU and KAI might need to take steps to be more intentional in cultural inclusion practices. A gesture that might demonstrate the department's willingness to foster a more inclusive atmosphere and would possibly help to increase ISAs' cultural acceptance levels would be to offer additional support and programming for ISAs throughout their first year at KU. Furthermore, connecting ISAs to individuals on campus or with other ISAs may be helpful for decreasing levels of cultural isolation.

It was also hypothesized that ISAs would feel less overall sense of belonging (Hypothesis 2) as well as less overall inclusion than their DSA peers (Hypothesis 3) but neither of these hypotheses were supported in this study. Moreover, there were no significant differences of mean scores based on overall belonging or inclusion. It is important to remember that the items which asked about belonging and inclusion were exploratory and were not measured by using an instrument shown to be valid. Therefore, these findings may indicate that the athletic department and campus are doing a good job in creating an inclusive space for ISAs. Their sense of

belonging, as it was like DSAs during their first year, could indicate that the department's programming and support has been as effective for both ISAs and DSAs in regard to helping them feel like they belong and are included.

Although the results did not support all the researcher's hypotheses, the results do give some insight into the experiences of student-athletes at KU. The findings indicate that DSAs and ISAs may feel similar feelings of belonging and inclusion during their first-year experiences at KU but the groups perceived different levels of cultural isolation and cultural acceptance.

### **Limitations**

Though this study was exploratory, in nature, an important limitation to the study was that the total number of participants was only 8 percent of the larger KAI student-athlete population, however nearly 64 percent of the ISAs enrolled at KU, at the time of data collection, did participate in the study. Given the small sample, the results should not be generalized to all the student-athletes at KU. Moreover, since the data was collected at one institution and based on the experiences by these student-athletes at this institution, the results from this study cannot be generalized to the general population, NCAA communities, or the ISA population.

There have not been any published studies measuring the validity and reliability of the instrument used in this study, FYECAS (Newell, 2016), and items that were added by the researcher should be viewed as exploratory. The terms used in the questions were not defined in the survey, therefore it was under the discretion of the participant to respond according to how they interpreted the terms. As such, participants could have different interpretations of the terms used. Additionally, the participants were asked to answer the questions in the survey based on their first-year experience in KAI. For some student-athletes this could have just been the previous year, for many it was two to four years ago. The varied length of time since their first

year could have led to misremembering information, or answering the questions from an experienced, perhaps well-adjusted perspective.

### **Future Directions**

More research should be done regarding student-athletes' experiences of belonging and inclusion during their collegiate years. This study only analyzed variables related to international status. Future studies could investigate group differences between sports, sex, gender identity, age, race, ethnicity, religion, sexuality, academic year and country of origin. Research should also examine the implications of an inclusive environment and the positive effects of individuals feeling a sense of belonging. Much like prior studies, belonging and inclusion can be related to other factors such as happiness and motivation. Future research should explore the relationship between belonging and inclusion to factors such as overall well-being, satisfaction, retention, team cohesion, motivation, or performance.

Lastly, since the NCAA has called for more inclusive environments, athletic departments and universities should assess their spaces and investigate student-athletes', coaches', and staff's perceptions of belonging and inclusion at their institution. Analyzing a program or collecting data over a long period of time may be beneficial for departments. This data can give feedback to the departments and can be used as a recruiting tool.



## References

- Abrams, D., Hogg, M. A., & Marques, J. M. (2004). *Social psychology of inclusion and exclusion*. Retrieved from <https://ebookcentral.proquest.com>
- Allen, J. B. (2006). The perceived belonging in sport scale: Examining validity. *Psychology of Sport & Exercise*, 7(4), 387-405. doi:10.1016/j.psychsport.2005.09.004
- Baker, R. W., & Siryk, B. (1989). *Student adaptation to college questionnaire manual*. Los Angeles: Western Psychological Services.
- Bale, J. (1991). *The brawn drain: Foreign student-athletes in American universities*. Urbana, IL: University of Illinois Press.
- Battle, R. (2016). *International student-athletes' retention at an NCAA division I institution* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (1873264909)
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529. doi:<http://dx.doi.org/10.1037/0033-2909.117.3.497>
- Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology*, 9, 165-195.
- Bentzinger, E. R. (2016). *International student-athlete experiences at the NCAA division I level* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (1808502350)
- Bista, K. & Gaulee, U. (2017). Recurring Themes Across Fractal Issues Facing International Students: A Thematic Analysis of 2016 Dissertations and Theses. *Journal of international students*, 7(4), 1135-1151.

- Brannon, T., Carter, E., Murdock-Perriera, L., & Higginbotham, G. (2018). From Backlash to Inclusion for All: Instituting Diversity Efforts to Maximize Benefits Across Group Lines. *Social Issues and Policy Review*, 12(1), 57-90.
- Brannon, T. N., Markus, H. R., & Taylor, V. J. (2015). "Two souls, two thoughts," two self-schemas: Double consciousness can have positive academic consequences for African Americans. *Journal of Personality and Social Psychology*, 108(4), 586-609.
- Carini, R., Kuh, G., & Klein, S. (2006). Student engagement and student learning. *Research in Higher Education*, 47 (1), 1-32.
- Chickering, A. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin*, 91(3), 540-572.
- Cooper, Kenneth J. (2012). Climate change: NCAA Office of Inclusion seeking to change campus culture in bid to promote diversity at all levels of intercollegiate sport. *Diverse Issues in Higher Education*, 29(8), 14.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. 4E. Boston, MA: Pearson Education, Inc.
- Etzel, E. F., Ferrante, A. P., & Pickney, J. W. (1996). *Counseling college student-athletes: Issues and interventions* (2<sup>nd</sup> ed.). Morgantown, WV: Fitness Information Technology, Inc.
- Foo, C. (2013). An Examination of International Student Athletes Traveling to the United States to Play College Sport (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (3729149)
- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education*, 75, 203-220. doi:10.3200/JEXE.75.3.203-220

- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*, 79–90.
- Gruter, M., & Masters, R. D. (1986). Ostracism as a social and biological phenomenon: An introduction. *Ethology and Sociobiology, 7*(3), 149-158.  
doi:[https://doi.org/10.1016/0162-3095\(86\)90043-9](https://doi.org/10.1016/0162-3095(86)90043-9)
- Hagerty, B.M.K., Lynch-Sauer, J., Patusky, K., Bouwseman, M., & Collier, P. (1992). Sense of belonging: a vital mental health concept. *Archives of Psychiatric Nursing, 6*, 172-177.
- Hagerty, B.M.K., & Patusky, K. (1995). Developing a measure of sense of belonging. *Nursing Research, 44*, 9-13.
- Hurtado, S. (2012). Foreward. In T. L. Strayhorn, *College students' sense of belonging. A key to educational success for all students* (pp. ix-x). New York, NY: Routledge.
- Jackson, A., & Krane, V. (1993). Adjustment to college life by freshman male basketball players. *Research Quarterly for Exercise and Sport Supplement, A*-109.
- James, W. (1890). *The principles of psychology*. New York, NY: Holt.
- Jordan, T. H. (2010). Moving From Diversity to Inclusion. *Profiles In Diversity Journal, 12*(2), 54.
- Kwon, Y. (2009). Factors affecting international students' transition to higher education institutions in the United States: From the perspective of Office of International Students. *College Student Journal, 43*(4), 1020-1036.
- Lee, J., & Opio, T. (2011). Coming to America: Challenges and difficulties faced by African student athletes. *Sport, Education and Society, 16*(5), 629-644.
- Maslow, A. (1954). *Motivation and personality*. New York: Harper & Row.

- McAdams, D. P., & Bryant, F. B. (1987). Intimacy motivation and subjective mental health in a nationwide sample. *Journal of Personality*, 55, 395-413.
- McDonough, M. H., Ullrich-French, S., Anderson-Butcher, D., Amorose, A. J., & Riley, A. (2013). Social Responsibility among Low-Income Youth in Physical Activity-Based Positive Youth Development Programs: Scale Development and Associations with Social Relationships. *Journal Of Applied Sport Psychology*, 25(4), 431-447.
- Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection. *Journal of Personality and Social Psychology*, 83(4), 896–918.
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling and Development*, 78, 137-144.
- Mueller, S. (2008). Investigating sense of school belonging amongst college students. Unpublished Doctor of Philosophy Dissertation, University of Houston. (UMI No.3309553)
- Murphy, M. C., & Zirkel, S. (2015). Race and belonging in school: How anticipated and experienced belonging affect choice, persistence, and performance. *Teachers College Record*, 117(12), 1–40.
- National Collegiate Athletic Association (NCAA). (2017). *Sport Sponsorship, Participation and Demographics Search* [Data file]. Retrieved from <http://web1.ncaa.org/rgdSearch/exec/main>.
- National Collegiate Athletic Association (NCAA). (2018a). *International Student-Athletes*. Retrieved from <http://www.ncaa.org/about/resources/inclusion/international-student-athletes>

- National Collegiate Athletic Association (NCAA). (2018b). *NCAA Division I*. Retrieved from <http://www.ncaa.org/about?division=d1>
- National Collegiate Athletic Association (NCAA). (2018c). *NCAA Inclusion Statement*. Retrieved from <http://www.ncaa.org/about/resources/inclusion/ncaa-inclusion-statement>
- National Collegiate Athletic Association (NCAA) (2018d). Trends in the Participation of International Student-Athletes in NCAA Divisions I and II. *International Student-Athlete Participation*. Retrieved from <http://www.ncaa.org/about/resources/research/international-student-athlete-participation>
- National Collegiate Athletic Association (NCAA). (2018e). *What is the NCAA?* Retrieved from <http://www.ncaa.org/about/resources/media-center/ncaa-101/what-ncaa>
- Newell, E. M. (2016). *The international student-athlete transition to college: Identifying struggles and suggestions for support* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10308521)
- Pfundmair, M., Graupmann, V., Du, H., Frey, D., & Aydin, N. (2015). Suddenly included: Cultural differences in experiencing re-inclusion. *International Journal of Psychology*, 50(2), 85-92. doi:10.1002/ijop.12082
- Pierce, D., Popp, N., & Meadows, B. (2011). Qualitative analysis of international student-athlete perspectives on recruitment and transitioning into American college sport. *The sport journal*, 14(1).
- Pittman, L. D., & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *The Journal of Experimental Education*, 75, 270-290. doi:10.3200/JEXE.75.4.270-29

- Pittman, L. D., & Richmond, A. (2008). University belonging and friendship quality during the transition to college: Links to self-perceptions and psychological symptoms. *Journal of Experimental Education*, 76, 343-361. doi:10.3200/JEXE.76.4.343-362
- Popp, N., Love, A. W., Kim, S., & Hums, M. A. (2010). Cross-Cultural Adjustments and International Collegiate Athletes. *Journal of intercollegiate sport*, 3(1), 163-181. doi:10.1123/jis.3.1.163
- Purdie-Vaughns, V., Steele, C. M., Davies, P. G., Dittmann, R., & Crosby, J. R. (2008). Social identity contingencies: How diversity cues signal threat or safety for African Americans in mainstream institutions. *Journal of Personality and Social Psychology*, 94(4), 615–630.
- Ridinger, L. L. & Pastore, D. L. (2000). International student-athlete adjustment to college: A preliminary analysis. *NACADA Journal*, 20(1), 33-41.
- Ryan, F. J. (1989). Participation in intercollegiate athletics: Affective outcomes. *Journal of College Student Development*, 30(2), 122-28.
- Sabourin, J. (2017). *International Student-athlete Adjustment Experience at Community Colleges in the Midwest* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (10605340)
- Sato, T., & Burge-Hall, V. (2008). International student athletes' experiences at a historically Black College and University (Report). *VAHPERD Journal*, 29(4), 16.
- Sato, T., Hodge, S., & Burge-Hall, V. (2011). International Student-Athletes' Academic, Athletic, and Social Experiences at a Historically Black University in America. *Journal for the Study of Sports and Athletes in Education*. 5(1), 45-72. DOI: 10.1179/ssa.2011.5.1.45

Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014). Social class culture cycles: How three gateway contexts shape selves and fuel inequality. *Annual Review of Psychology*, 65, 611–634.

Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54(2), 323-338. doi:<http://dx.doi.org/10.1037/0022-3514.54.2.323>

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92(1), 82–96.

## Appendix A: IRB Approval



### APPROVAL OF PROTOCOL

June 28, 2017

Emily Tyler  
ejtyler@ku.edu

Dear Emily Tyler:

On 6/28/2017, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Student-Athlete Perceptions of Belonging, Inclusion, and Satisfaction in Kansas Athletics Inc.
Investigator:	Emily Tyler
IRB ID:	STUDY00141157
Funding:	None
Grant ID:	None
Documents Reviewed:	• IRB ISA Information Statement, • IRB ISA Survey , • IRB Recruitment Email, • ISA KU Human Research Protocol

The IRB approved the study on 6/28/2017.

1. Notify HRPP about any new investigators not named in original application. Note that new investigators must take the online tutorial at [https://rgs.drupal.ku.edu/human\\_subjects\\_compliance\\_training](https://rgs.drupal.ku.edu/human_subjects_compliance_training).
2. Any injury to a subject because of the research procedure must be reported immediately.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.

Continuing review is not required for this project, however you are required to report any significant changes to the protocol prior to altering the project.

Please note university data security and handling requirements for your project:

<https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm>

You must use the final, watermarked version of the consent form, available under the "Documents" tab in eCompliance.

Sincerely,

Jocelyn Isley, MS, CIP

Interim IRB Administrator, KU Lawrence Campus



## Appendix B: Recruitment Email

### Thesis Study on Collegiate Student-Athlete Perceptions and Experiences

**Project Title:** Student-Athletes Perceptions of Inclusion, Belonging, and Satisfaction at Kansas Athletics Inc.

**Researcher:** Emily Tyler

**E-mail:** ejtyler@ku.edu

**Faculty Sponsor:** Brian Cole, PhD; bricole@ku.edu

Dear \_\_\_\_\_[student-athlete name]\_\_\_\_\_,

We are contacting you regarding your participation in a research study approved and sponsored by Kansas Athletics Inc. This current research study is investigating student-athletes' perceptions of inclusion, belonging, and satisfaction during their experience as a student-athlete in Kansas Athletics Inc. This study has been approved by the Institutional Review Board (IRB) of The University of Kansas (Approval Number: 00141157). It is our hope that you find this as an opportunity to give anonymous feedback to Kansas Athletics Inc. about your experience as a student-athlete at The University of Kansas.

**If you are 18 years or older please use the link below.** You will be directed to an online survey that is anticipated to take approximately 10 to 15 minutes to complete. Participation is voluntary. You are not required to participate in any way, and can exit the survey at any time.

Survey link: [http://kuclas.qualtrics.com/jfe/form/SV\\_dav2v69XpwZGeJT](http://kuclas.qualtrics.com/jfe/form/SV_dav2v69XpwZGeJT)

If you have any concerns about your selection or your rights as a research participant, you may you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email [irb@ku.edu](mailto:irb@ku.edu).

Thank you very much for your time and effort!

Rock Chalk!

Paul Buskirk  
Associate Athletics Director-  
Student-Athlete Support Services  
Kansas Athletics Inc.  
[pbuskirk@ku.edu](mailto:pbuskirk@ku.edu)

Jane Widger-Fulton  
Senior Associate Athletics Director-  
Student-Athlete Development  
Kansas Athletics Inc.  
[jwfulton@ku.edu](mailto:jwfulton@ku.edu)

Emily Tyler  
Master's Student of Counseling Psychology  
The University of Kansas  
[ejtyler@ku.edu](mailto:ejtyler@ku.edu)

Dr. Phil Lowcock  
Director of International Student-Athlete Support  
Kansas Athletics Inc.  
[plowcock@ku.edu](mailto:plowcock@ku.edu)

## **Appendix C: Information Statement**

### **Information Statement for Student-Athlete Perceptions of Belonging, Inclusion, and Satisfaction in Kansas Athletics Inc.**

We are requesting that you participate in a research study sponsored by the Department of Educational Psychology at the University of Kansas which supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand student-athletes' feelings of belonging, inclusion, and satisfaction at Kansas Athletics Inc. For us to do this, we would like you to complete 2 surveys expected to take less than 10 minutes each to complete. The surveys include established instruments that include questions regarding your experience as a student-athlete at The University of Kansas. The context of the surveys should cause no more discomfort than you would experience in your everyday life. We ask that you complete the first of two surveys as soon as possible. The second survey will be sent to you in 10 months through the email you provide. The researchers will assign you a pin number so that we can de-identify your responses and link your responses to both surveys. Email addresses and pin numbers will be kept in a separate secure file accessible only to the researchers.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of international student-athletes' adjustment experiences compared to domestic student-athletes. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. The information that you choose to provide us online will be kept encrypted and only the researchers will have access to that information. It is possible, however, with internet communications, that through intent or accident, someone other than the intended recipient may see your responses, but without any personal identifying information they will be unable to identify whose information they would be viewing.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by mail. Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email [irb@ku.edu](mailto:irb@ku.edu).

Sincerely,

Emily Tyler  
Principal Investigator  
Educational Psychology  
Joseph R. Pearson Hall  
University of Kansas  
Lawrence, KS 66045  
[ejtyler@ku.edu](mailto:ejtyler@ku.edu)

Brian Cole, Ph.D.  
Faculty Supervisor  
Educational Psychology  
Joseph R. Pearson Hall  
University of Kansas  
Lawrence, KS 66045  
[bricole@ku.edu](mailto:bricole@ku.edu)

## Appendix D: Survey

Demo1 Which KU sport team are you participating on?

- ☐ Baseball (1)
- ☐ Football (2)
- ☐ Men's Basketball (3)
- ☐ Men's Cross Country (4)
- ☐ Men's Golf (5)
- ☐ Men's Track & Field (Indoor or Outdoor) (6)
- ☐ Rowing (7)
- ☐ Soccer (8)
- ☐ Softball (9)
- ☐ Swimming/Diving (10)
- ☐ Tennis (11)
- ☐ Women's Basketball (12)
- ☐ Women's Cross Country (13)
- ☐ Women's Golf (14)
- ☐ Women's Track & Field (Indoor or Outdoor) (15)
- ☐ Volleyball (16)

Demo2 What year are you in school?

- ☐ Year 1 (1)
- ☐ Year 2 (2)
- ☐ Year 3 (3)
- ☐ Year 4 (4)
- ☐ Year 5 (5)
- ☐ Year 6+ (6)

Demo3 How many academic years have you completed at KU?

- ☐ 0 (1)
- ☐ 1 (2)
- ☐ 2 (3)
- ☐ 3 (4)
- ☐ 4 (5)
- ☐ 5+ (6)

Demo4 How do you describe yourself?

- ☐ American Indian or Alaskan Native (1)
- ☐ Asian or Asian American (2)
- ☐ Black or African American (3)
- ☐ Hispanic or Latino (4)
- ☐ Native Hawaiian or Pacific Islander (5)
- ☐ White (6)
- ☐ Multiracial (7)
- ☐ Other (8) \_\_\_\_\_

Demo5 Do you consider yourself to be an **international** student-athlete?

\* "International student-athlete" is defined as an individual competing in intercollegiate athletics and who is not originally from the United States.

- ☐ Yes (1)
- ☐ No (2)

Demo6 If you are not originally from the United States, what country do you hold a passport in (i.e. which country issued your passport to you)?

- ☐ \_\_\_\_\_ (1)
- ☐ I am originally from the United States (2)

Demo7 How many years of English language experience do you have?

- ☐ Native English speaker (1)
- ☐ 10+ years of English speaking experience (2)
- ☐ 7-9 years of English speaking experience (3)
- ☐ 4-6 years of English speaking experience (4)
- ☐ 1-3 years of English speaking experience (5)
- ☐ Less than 1 year of English speaking experience (6)

FYE1 For the following questions, please use the stem:

During my first year of college, I often.....

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Somewhat agree (4)	Agree (5)	Strongly agree (6)
felt homesick. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
felt unprepared for the level of academics. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
had difficulty with language comprehension (speaking or hearing). (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
was unsatisfied with campus-area food selection. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
felt concerned about my/my parents' financial situation. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
had a hard time meeting friends/forming relationships. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
had difficulty adjusting to weather/climate. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
did not understand cultural norms. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
felt culturally isolated. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
felt like I was more mature than my classmates. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
struggled to understand classroom expectations. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
felt culturally accepted. (12)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FYE2 For the following questions, please use the stem:

During my first year as a student-athlete, .....

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Somewhat agree (4)	Agree (5)	Strongly agree (6)
I felt included in the athletic department (1)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was underprepared for the level of training expected. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had trouble understanding my coaches/teammates. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I lacked knowledge of NCAA rules. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt included on my team (5)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had trouble adjusting to college sports in the U.S. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it difficult to travel home to see my family, even during breaks. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I struggled with time management. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I belonged in the athletic department (9)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not feel supported during competitions. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt isolated from my teammates. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not feel supported academically. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I belonged on campus (13)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not know about services on-campus that could help me (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt isolated on campus (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had difficulty adjusting to weather/climate/terrain. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I belonged on my team (17)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I struggled to deal with lack of playing time. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I struggled to deal with in-sport expectations. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had a difficult time balancing academics and athletics (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt included on campus (21)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Appendix E: MANOVA Outputs

### Research Question 1: MANOVA Output

#### Between-Subjects Factors

		Value Label	N
Demo5: Do you consider yourself to be an international student-athlete?	1	Yes	23
* "International student-athlete" is defined as an individual competing in intercollegiate athletics and who is not originally from the United States.	2	No	21

#### Descriptive Statistics

	Do you consider yourself to be an international student-athlete?	Mean	Std. Deviation	N
During my first year of college, I often..... - felt culturally isolated.	Yes	2.65	.982	23
	No	1.67	.658	21
	Total	2.18	.971	44
During my first year of college, I often..... - felt culturally accepted.	Yes	4.43	.788	23
	No	5.00	.632	21
	Total	4.70	.765	44

#### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.985	1338.424 <sup>b</sup>	2.000	41.000	.000
	Wilks' Lambda	.015	1338.424 <sup>b</sup>	2.000	41.000	.000
	Hotelling's Trace	65.289	1338.424 <sup>b</sup>	2.000	41.000	.000
	Roy's Largest Root	65.289	1338.424 <sup>b</sup>	2.000	41.000	.000
Demo5	Pillai's Trace	.297	8.677 <sup>b</sup>	2.000	41.000	.001
	Wilks' Lambda	.703	8.677 <sup>b</sup>	2.000	41.000	.001
	Hotelling's Trace	.423	8.677 <sup>b</sup>	2.000	41.000	.001
	Roy's Largest Root	.423	8.677 <sup>b</sup>	2.000	41.000	.001

a. Design: Intercept + Demo5

b. Exact statistic

### Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	During my first year of college, I often..... - felt culturally isolated.	10.661 <sup>a</sup>	1	10.661	14.984	.000
	During my first year of college, I often..... - felt culturally accepted.	3.507 <sup>b</sup>	1	3.507	6.803	.013
Intercept	During my first year of college, I often..... - felt culturally isolated.	204.752	1	204.752	287.765	.000
	During my first year of college, I often..... - felt culturally accepted.	977.143	1	977.143	1895.423	.000
Demo5	During my first year of college, I often..... - felt culturally isolated.	10.661	1	10.661	14.984	.000
	During my first year of college, I often..... - felt culturally accepted.	3.507	1	3.507	6.803	.013
Error	During my first year of college, I often..... - felt culturally isolated.	29.884	42	.712		
	During my first year of college, I often..... - felt culturally accepted.	21.652	42	.516		
Total	During my first year of college, I often..... - felt culturally isolated.	250.000	44			
	During my first year of college, I often..... - felt culturally accepted.	999.000	44			
Corrected Total	During my first year of college, I often..... - felt culturally isolated.	40.545	43			
	During my first year of college, I often..... - felt culturally accepted.	25.159	43			

a. R Squared = .263 (Adjusted R Squared = .245)

b. R Squared = .139 (Adjusted R Squared = .119)



## Research Question 2: MANOVA Output

### Descriptive Statistics

	Do you consider yourself to be an international student-athlete?	Mean	Std. Deviation	N
During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	Yes	5.00	.798	23
	No	4.52	.928	21
	Total	4.77	.886	44
During my first year as a student-athlete, ..... - I felt like I belonged on campus	Yes	4.39	.941	23
	No	4.52	1.030	21
	Total	4.45	.975	44
During my first year as a student-athlete, ..... - I felt like I belonged on my team	Yes	5.00	.674	23
	No	4.67	.658	21
	Total	4.84	.680	44

### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.984	835.205 <sup>b</sup>	3.000	40.000	.000
	Wilks' Lambda	.016	835.205 <sup>b</sup>	3.000	40.000	.000
	Hotelling's Trace	62.640	835.205 <sup>b</sup>	3.000	40.000	.000
	Roy's Largest Root	62.640	835.205 <sup>b</sup>	3.000	40.000	.000
Demo5	Pillai's Trace	.128	1.955 <sup>b</sup>	3.000	40.000	.136
	Wilks' Lambda	.872	1.955 <sup>b</sup>	3.000	40.000	.136
	Hotelling's Trace	.147	1.955 <sup>b</sup>	3.000	40.000	.136
	Roy's Largest Root	.147	1.955 <sup>b</sup>	3.000	40.000	.136

a. Design: Intercept + Demo5

b. Exact statistic

### Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	2.489 <sup>a</sup>	1	2.489	3.347	.074
	During my first year as a student-athlete, ..... - I felt like I belonged on campus	.193 <sup>b</sup>	1	.193	.199	.658
	During my first year as a student-athlete, ..... - I felt like I belonged on my team	1.220 <sup>c</sup>	1	1.220	2.744	.105
Intercept	During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	995.671	1	995.671	1338.692	.000
	During my first year as a student-athlete, ..... - I felt like I belonged on campus	872.465	1	872.465	899.971	.000
	During my first year as a student-athlete, ..... - I felt like I belonged on my team	1025.765	1	1025.765	2307.972	.000
Demo5	During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	2.489	1	2.489	3.347	.074
	During my first year as a student-athlete, ..... - I felt like I belonged on campus	.193	1	.193	.199	.658
	During my first year as a student-athlete, ..... - I felt like I belonged on my team	1.220	1	1.220	2.744	.105
Error	During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	31.238	42	.744		
	During my first year as a student-athlete, ..... - I felt like I belonged on campus	40.716	42	.969		
	During my first year as a student-athlete, ..... - I felt like I belonged on my team	18.667	42	.444		
Total	During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	1036.000	44			
	During my first year as a student-athlete, ..... - I felt like I belonged on campus	914.000	44			
	During my first year as a student-athlete, ..... - I felt like I belonged on my team	1051.000	44			
Corrected Total	During my first year as a student-athlete, ..... - I felt like I belonged in the athletic department	33.727	43			
	During my first year as a student-athlete, ..... - I felt like I belonged on campus	40.909	43			
	During my first year as a student-athlete, ..... - I felt like I belonged on my team	19.886	43			

a. R Squared = .074 (Adjusted R Squared = .052)

b. R Squared = .005 (Adjusted R Squared = -.019)

c. R Squared = .061 (Adjusted R Squared = .039)

### Research Question 3: MANOVA Output

#### Descriptive Statistics

		Do you consider yourself to be an international student-athlete?	Mean	Std. Deviation	N
During my first year as a student-athlete, ..... - I felt included in the athletic department	Yes		5.04	.706	23
	No		4.81	.814	21
	Total		4.93	.759	44
During my first year as a student-athlete, ..... - I felt included on my team	Yes		5.00	.674	23
	No		4.81	.873	21
	Total		4.91	.772	44
During my first year as a student-athlete, ..... - I felt included on campus	Yes		4.35	.832	23
	No		4.71	.784	21
	Total		4.52	.821	44

#### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.985	849.349 <sup>b</sup>	3.000	40.000	.000
	Wilks' Lambda	.015	849.349 <sup>b</sup>	3.000	40.000	.000
	Hotelling's Trace	63.701	849.349 <sup>b</sup>	3.000	40.000	.000
	Roy's Largest Root	63.701	849.349 <sup>b</sup>	3.000	40.000	.000
Demo5	Pillai's Trace	.138	2.143 <sup>b</sup>	3.000	40.000	.110
	Wilks' Lambda	.862	2.143 <sup>b</sup>	3.000	40.000	.110
	Hotelling's Trace	.161	2.143 <sup>b</sup>	3.000	40.000	.110
	Roy's Largest Root	.161	2.143 <sup>b</sup>	3.000	40.000	.110

a. Design: Intercept + Demo5

b. Exact statistic

### Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	During my first year as a student-athlete, ..... - I felt included in the athletic department	.601 <sup>a</sup>	1	.601	1.043	.313
	During my first year as a student-athlete, ..... - I felt included on my team	.398 <sup>b</sup>	1	.398	.663	.420
	During my first year as a student-athlete, ..... - I felt included on campus	1.474 <sup>c</sup>	1	1.474	2.251	.141
Intercept	During my first year as a student-athlete, ..... - I felt included in the athletic department	1065.692	1	1065.692	1849.959	.000
	During my first year as a student-athlete, ..... - I felt included on my team	1056.307	1	1056.307	1757.855	.000
	During my first year as a student-athlete, ..... - I felt included on campus	901.474	1	901.474	1376.641	.000
Demo5	During my first year as a student-athlete, ..... - I felt included in the athletic department	.601	1	.601	1.043	.313
	During my first year as a student-athlete, ..... - I felt included on my team	.398	1	.398	.663	.420
	During my first year as a student-athlete, ..... - I felt included on campus	1.474	1	1.474	2.251	.141
Error	During my first year as a student-athlete, ..... - I felt included in the athletic department	24.195	42	.576		
	During my first year as a student-athlete, ..... - I felt included on my team	25.238	42	.601		
	During my first year as a student-athlete, ..... - I felt included on campus	27.503	42	.655		
Total	During my first year as a student-athlete, ..... - I felt included in the athletic department	1095.000	44			
	During my first year as a student-athlete, ..... - I felt included on my team	1086.000	44			
	During my first year as a student-athlete, ..... - I felt included on campus	929.000	44			
Corrected Total	During my first year as a student-athlete, ..... - I felt included in the athletic department	24.795	43			
	During my first year as a student-athlete, ..... - I felt included on my team	25.636	43			
	During my first year as a student-athlete, ..... - I felt included on campus	28.977	43			

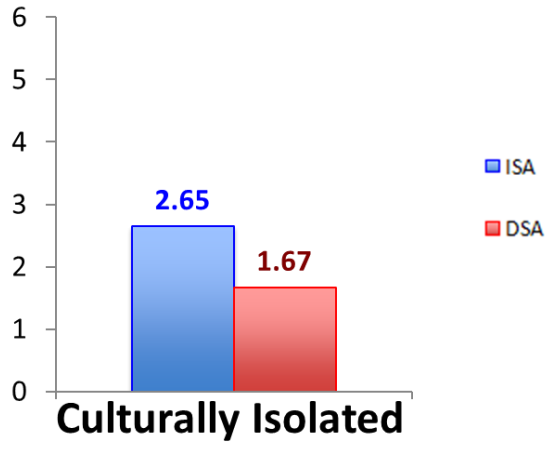
a. R Squared = .024 (Adjusted R Squared = .001)

b. R Squared = .016 (Adjusted R Squared = -.008)

c. R Squared = .051 (Adjusted R Squared = .028)

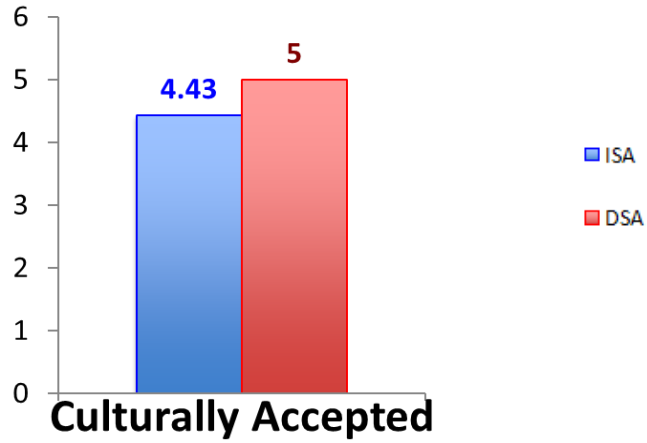
## Appendix F: Figures

Figure F1: Cultural items mean scores (Hypothesis 1a)



1 (*Strongly disagree*) to 6 (*Strongly agree*)

Figure F2: Cultural acceptance mean scores (Hypothesis 1b)



1 (*Strongly disagree*) to 6 (*Strongly agree*)

Figure F3: Belonging items mean scores (Hypothesis 2)

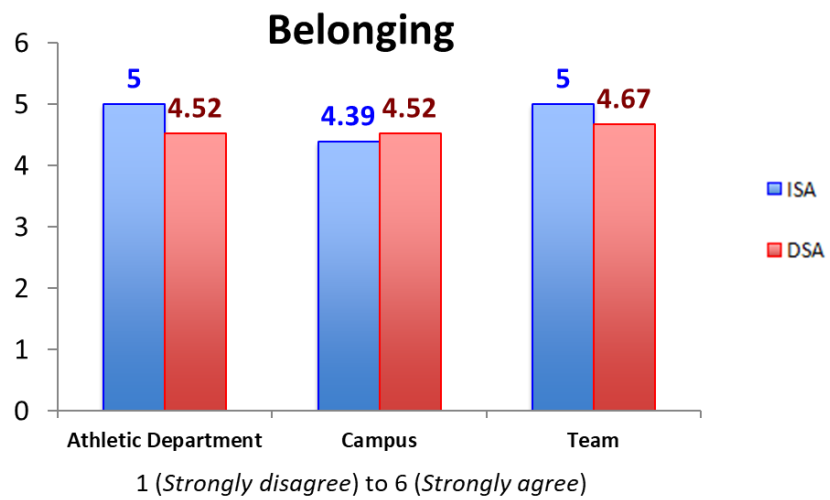


Figure F4: Inclusion items mean scores (Hypothesis 3)

